# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/085,192 | 02/27/2002 | Koji Kunii | 450100-03799 | 1447 |

20999          7590          01/06/2011
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| ART UNIT | PAPER NUMBER |
|---|---|
| 2481 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 01/06/2011 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _20 September 2010_.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-14,16-27,29-37,39-43 and 46_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-14,16-27,29-37,39-43 and 46_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _27 February 2002_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _7/8/2010,8/30/2010,11/24/2010_.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1.      Applicant's arguments filed September 20, 2010 have been fully considered but they are not persuasive.

The Applicant argues that neither Ellis et al., Miller et al., Mizutome et al., Huang et al., nor Berger et al., taken alone or in combination disclose a "converter means coupled to said storing means and providing means" whereby the "converter means converts, under control of said providing means, said program information retrieved from said storing means from a page description language format structured hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval".  The Examiner respectfully disagrees.  Berger et al. discloses in Fig. 13 the converter means (70 - automatic content transformation system, which would be located in the wireless gateway (152)) being coupled to the storing means (154) and providing means (152) (col. 12, lines 23-47 - describes the communication between the wireless device and the wired device) wherein the providing means (152)controls the converter means (70) (col. 12, lines 23-47 - the providing means (152) controls the converter in that it knows which language the documents needs to be converted in).  Berger et al. also discloses converting the page description language format structured hierarchically using tags (HTML or another markup language) to another

database format that excludes said tags (WHL, HDML, XML, VoxML, text,....),

wherein said another database format (WHL, HDML, XML, VoxML, text,....)

comprises a less amount of data than said page description language (HTML or

another markup language) and requires no data analysis following retrieval (Fig.

13; col. 12, lines 44-67).  Furthermore, Berger et al. discloses in the table

disclosed in col. 11 that one of the wireless devices supported is the Palm VII,

which would use the Palm operating system that would require the documents to

be formatted according to the pdb format.  Since Berger et al. supports Palm

wireless devices the conversion process disclosed by Berger et al. would be the

same as the conversion process disclosed by the Applicant, meaning that the

first format includes tags and the other format excludes tags.  Then once the

documents are properly converted according to the device receiving them no

further data analysis is needed once the document is retrieved by the device.

Therefore, Berger et al. meets the claimed limitations and the rejection is

maintained.


### *Claim Rejections - 35 USC § 101*

2.      The system and apparatus claims 1-14, 16-25, 29-35, 39-41, and 46 are

considered to be statutory because they invoke 35 U.S.C. 112 sixth paragraph and

therefore, are considered to be claiming hardware.  Method claims 26, 36, and 42 are

considered to be statutory because they are tied to an apparatus either explicitly by

claiming the portable information terminal apparatus or inherently by claiming that the

unattended recording is being controlled.  Medium claims 27, 37, and 43 are considered

to be statutory because they are only directed towards non-transitory computer-

readable mediums.


## 35 USC § 112

3.      Claims 1-7, 9, 14, 19-21, 25, 29, 30, 39-41, and 46 invoke 35 U.S.C. 112 sixth

paragraph by meeting the limitations set forth in the three prong test specified in MPEP

2181.  Regarding claims 1, 5, 7, 9, and 39, the storing means for storing is considered

to read on the TV program information database (192) in Fig. 10; the providing means

for retrieving said program information is considered to read on the TV program

information server (191) in Fig 10; the acquiring means for acquiring said program

information in the portable terminal is considered to read on the wireless LAN

communication unit (64), the communication unit (53) or the Infrared communication

unit (22) in Fig. 5; the establishing means for establishing preset information is

considered to read on the TV program recording preset program (83); the preset list

(92), and the preset information memory (93) in Fig. 5; the transmitting means for

transmitting the preset information is considered to read on the program data

communication (81) in Fig. 5; the receiving means for receiving present information is

considered to read on the wireless LAN communication unit (147), the communication

board (145) or the Infrared communication unit (146) in Fig. 7; the recording controlling

means for controlling the recording is considered to read on the image processing board

(144) and the HDD (141) in Figs. 7 and 8; and the displaying means for displaying said

program information is considered to read on the display unit (31) in Fig. 5. Regarding

claims 2 and 6, the converting means for converting the program information is

considered to read on the converter (193) in Fig. 10. Regarding claims 3 and 4, the

generating means for generating a preset signal is considered to read on the TV

program recording preset program (83) in Fig. 5. Regarding claims 14 and 19, the

storing means for storing said preset information is considered to read on the preset

information memory (93) in Fig. 5; and the controlling means for controlling exchanges

is considered to read on the program I/O control (82) in Fig. 5. Regarding claim 20, the

receiving means for receiving the converted data is considered to read on the wireless

LAN communication unit (64), the communication unit (53) or the Infrared

communication unit (22) in Fig. 5. Regarding claim 21, the managing means for

managing a schedule list is considered to read on the schedule list program (84) in Fig.

5; and the judging means for judging whether or not to write the preset information is

considered to read on the TV program recording preset program (83) in Fig. 5.

Regarding claim 25, the updating means for updating said preset information is

considered to read on the TV program recording preset program (83) in Fig. 5.

Regarding claim 29, the storing means for storing said program information and

advertisement information is considered to read on the TV program information

database (192) and the advertisement information database (196) in Fig. 10; the

converting means for providing said data is considered to read on the converter (193) in

Fig. 10. Regarding claim 30, the charging means for calculating a fee for inserting

advertisement information is considered to read on the charge server (197) in Fig. 10.

Regarding claim 40, the transmitting means for transmitting the converted image data is

considered to read on the TV program information server (191) in Fig. 10. Regarding

claim 41, the transmitting means for transmitting to said portable information terminal is

considered to read on the wireless LAN communication unit (147), the communication

board (145) or the Infrared communication unit (146) in Fig. 7. Regarding claim 46, the

first storing means for storing the first file format is considered to read on the TV

program information database (192) in Fig. 10; and the second storing means for

storing the second file format is considered to read on the pdb-format TV program

information database (194) in Fig. 10.


### *Claim Rejections - 35 USC § 103*

4.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.      Claims 1-8 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Ellis et al. (U.S. Patent 6,898,762) in view of Miller et al. (GB 2 343 074) in view of

Mizutome et al. (U.S. Patent 7,469,413) in view of Huang et al. (U.S. Patent 6,437,836)

in view of Berger et al. (U.S. Patent 7,210,100).

Regarding claim **1**,  Ellis et al. discloses an information processing system

comprising a program information providing apparatus for providing program

information about programs, and an information processing apparatus having

recording and reproducing functions; wherein said program information providing

apparatus includes: storing means for storing said program information (Fig. 1);

and providing means for retrieving said program information from said storing

means before providing the retrieved program information to the user's apparatus

(Figs. 2a-2c; col. 5, lines 6-22); and wherein said information processing

apparatus includes: receiving means for receiving said preset information from

the user's apparatus; and recording controlling means for controlling the

unattended recording of said desired program based on said preset information

received by said receiving means (col. 9, line 17 - col. 10, line 2). Furthermore,

Ellis et al. discloses the information processing system further comprises

converter means for converting said program information from a page description

language format to another database format, wherein said another database

format comprises a less amount of data than said page description language

(Ellis et al.: col. 1, line 65 - col. 2, line 3 - there are several ways to send the

information which would all require different formatting; the information going to

the portable information terminal apparatus will have less information than the

information going to a set-top box). However, Ellis et al. fails to disclose a

portable information terminal apparatus owned by a user, wherein the program

information terminal apparatus includes: a providing means that retrieves the

program information based on identifying a user ID associated with an

information request transmitted from the portable information terminal apparatus,

wherein upon identifying the user ID the retrieved program information includes

registered content applicable to the user ID, and wherein the user ID is

unidentifiable, the retrieved program information includes commonly watched

channels. Furthermore, Ellis et al. fails to disclose a portable information

terminal apparatus owned by a user, wherein the portable information terminal

apparatus includes: acquiring means for acquiring said program information from

said program information providing apparatus; establishing means for

establishing preset information for presetting a desired program to be recorded

unattended based on said program information acquired by said acquiring

means; and transmitting means for transmitting to said information processing

apparatus said preset information established by said establishing means.

Regarding the converting means, Ellis et al. fails to explicitly disclose convertor

means coupled to said storing means and providing means, said convertor

means converting, under control of said providing means, said program

information hierarchically using tags to another database format that excludes

said tags, wherein said another database format comprises a less amount of

data than said page description language and requires no data analysis following

retrieval.

Referring to the Miller et al., Miller et al. discloses an information

processing system comprising a program information providing apparatus for

providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, the providing means

retrieving the program information based on identifying a user ID associated with an information request transmitted from the terminal apparatus, wherein upon identifying the user ID the retrieved program information includes registered content applicable to the user ID (Figs. 2, 3, and 10-12; page 4, lines 15-19; page 17, lines 10-29 – custom program guides (EPGs)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided program guides according to the user's preferences based on their user ID as disclosed by Miller et al in the information processing system disclosed by Ellis et al. in order to provide a more user friendly program guide by allowing the user to customize their guide. However, Ellis et al. in view of Miller et al. fail to disclose that when the user ID is unidentifiable, the retrieved program information includes commonly watched channels. Furthermore, Ellis et al. in view of Miller et al. still fail to disclose a portable information terminal apparatus owned by a user, wherein the portable information terminal apparatus includes: acquiring means for acquiring said program information from said program information providing apparatus; establishing means for establishing preset information for presetting a desired program to be recorded unattended based on said program information acquired by said acquiring means; and transmitting means for transmitting to said information processing apparatus said preset information established by said establishing means as well as a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said

providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Mizutome et al., Mizutome et al. discloses an information processing system comprising a program information providing apparatus for providing program information about programs that includes: providing means for retrieving the program information from the storing means before providing the retrieved program information to a terminal apparatus, wherein the retrieved program information can be customized and when there is no user preferences specified a default program guide (commonly watched channels) is displayed to the user (Figs. 16A, 16B, 22A, and 22B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have displayed a default program guide when no user preferences are specified or found as disclosed by Mizutome et al. in the information processing system disclosed by Ellis et al. in view of Miller et al. in order to be able to display a program guide whether or not one is customized for that user or not. Mizutome et al. fails to explicitly state that the default program guide is displayed when the user ID is unidentifiable, but rather when no user preferences are found or specified. However, when Mizutome et al. is combined with Ellis et al. in view of Miller et al. no user preferences being specified are equivalent to finding no user ID corresponding to the user since Ellis et al. in view

of Miller et al. is based on user IDs. Furthermore, Ellis et al. in view of Miller et al. in view of Mizutome et al. still fail to disclose a portable information terminal apparatus owned by a user, wherein the portable information terminal apparatus includes: acquiring means for acquiring said program information from said program information providing apparatus; establishing means for establishing preset information for presetting a desired program to be recorded unattended based on said program information acquired by said acquiring means; and transmitting means for transmitting to said information processing apparatus said preset information established by said establishing means as well as a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Huang et al. reference, Huang et al. discloses a portable information terminal apparatus owned by a user, wherein the portable information terminal apparatus includes: acquiring means for acquiring said program information from said program information providing apparatus; establishing means for establishing preset information for presetting a desired program to be recorded unattended based on said program information acquired by said acquiring means; and transmitting means for transmitting to said information

processing apparatus said preset information established by said establishing means (Figs.2 and  4; col. 3, lines 56-65).  Furthermore, Huang et al. discloses a portable terminal that utilizes the Palm operating system (Fig. 2), which would require the EPG to be converted to a language that excludes tag information that requires less data to be transmitted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the portable information terminal apparatus disclosed by Huang et al. to schedule recordings remotely with the program guide distribution system disclosed by Ellis et al. in view of Miller et al. in view of Mizutome et al. since Ellis et al. is able to send the program guides over the internet in order to allow the user to schedule any recordings they may have forgotten to when they were home, making the device more user-friendly and to not require as much data be sent to the portable terminal since it operates in the Palm OS.

However,  Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. still fail to explicitly disclose a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Berger et al. reference, Berger et al. discloses a program information providing apparatus comprising a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval (Figs. 1 and 13; col. 10, line 43 - col. 11, line 54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a convertor means as disclosed by Berger et al. in the device disclosed by Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in order to have properly transmitted the program guide to the portable information terminal.

Regarding claim **2**, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in view of Berger et al. discloses all the limitations previously discussed with respect to claim 1 including that the program information providing apparatus further includes converting means for retrieving said program information from said storing means before converting the retrieved program information into data of a file format compatible with said portable information terminal apparatus; and wherein said providing means provides said data converted by said converting means to said portable information terminal

apparatus (Ellis et al.: col. 1, line 65 - col. 2, line 3 - there are several ways to

send the information which would all require different formatting).

Regarding claim **3**, Ellis et al. in view of Miller et al. in view of Mizutome et

al. in view of Huang et al. in view of Berger et al. discloses all the limitations

previously discussed with respect to claim 1 including that the aid portable

information terminal apparatus further includes generating means for generating

a preset signal corresponding to said preset information established by said

establishing means; and wherein said transmitting means transmits to said

information processing apparatus infrared rays modulated to represent said

preset signal generated by said generating means (Huang et al.: Fig. 2; col.4,

line 62 - col. 5, line 9).

Regarding claim **4**, Ellis et al. in view of Miller et al. in view of Mizutome et

al. in view of Huang et al. in view of Berger et al. discloses all the limitations

previously discussed with respect to claim 1 including that the portable

information terminal apparatus further includes generating means for generating

a preset signal corresponding to said preset information established by said

establishing means; and wherein said transmitting means transmits to said

information processing apparatus radio waves modulated to represent said

preset signal generated by said generating means (Huang et al.: col. 9, lines 12-

24).

Regarding claim **5**,  Ellis et al. discloses an information processing system

comprising a program information providing apparatus for providing program

information about programs, and an information processing apparatus having

recording and reproducing functions; wherein said program information providing

apparatus includes: storing means for storing said program information  and

advertisement information (Fig. 1); and providing means for retrieving said

program information  and the advertisement information from said storing means

before providing the retrieved program information to the user's apparatus (Figs.

2a-2c; col. 5, lines 6-22); and wherein said information processing apparatus

includes: receiving means for receiving said preset information from the user's

apparatus; and recording controlling means for controlling the unattended

recording of said desired program based on said preset information received by

said receiving means (Figs. 5-8c - advertisement information is displayed along

with the program information; col. 9, line 17 - col. 10, line 2).  Furthermore, Ellis

et al. discloses the information processing system further comprises converter

means for converting said program information from a page description language

format to another database format, wherein said another database format

comprises a less amount of data than said page description language  (Ellis et

al.: col. 1, line 65 - col. 2, line 3 - there are several ways to send the information

which would all require different formatting; the information going to the portable

information terminal apparatus will have less information than the information

going to a set-top box).  However, Ellis et al. fails to disclose a portable

information terminal apparatus owned by a user, wherein the program

information terminal apparatus includes: a providing means that retrieves the

program information based on identifying a user ID associated with an

information request transmitted from the portable information terminal apparatus,

wherein upon identifying the user ID the retrieved program information includes

registered content applicable to the user ID, and wherein the user ID is

unidentifiable, the retrieved program information includes commonly watched

channels.  Furthermore, Ellis et al. fails to disclose a portable information

terminal apparatus owned by a user, wherein the portable information terminal

apparatus includes: acquiring means for acquiring said program information from

said program information providing apparatus; establishing means for

establishing preset information for presetting a desired program to be recorded

unattended based on said program information acquired by said acquiring

means; and transmitting means for transmitting to said information processing

apparatus said preset information established by said establishing means.

Regarding the converting means, Ellis et al. fails to explicitly disclose convertor

means coupled to said storing means and providing means, said convertor

means converting, under control of said providing means, said program

information hierarchically using tags to another database format that excludes

said tags, wherein said another database format comprises a less amount of

data than said page description language and requires no data analysis following

retrieval.

Referring to the Miller et al., Miller et al. discloses an information

processing system comprising a program information providing apparatus for

providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, the providing means

retrieving the program information based on identifying a user ID associated with

an information request transmitted from the terminal apparatus, wherein upon

identifying the user ID the retrieved program information includes registered

content applicable to the user ID (Figs. 2, 3, and 10-12; page 4, lines 15-19; page

17, lines 10-29 – custom program guides (EPGs)).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have provided program guides according to

the user's preferences based on their user ID as disclosed by Miller et al in the

information processing system disclosed by Ellis et al. in order to provide a more

user friendly program guide by allowing the user to customize their guide.

However, Ellis et al. in view of Miller et al. fail to disclose that when the user ID is

unidentifiable, the retrieved program information includes commonly watched

channels.  Furthermore, Ellis et al. in view of Miller et al. still fail to disclose a

portable information terminal apparatus owned by a user, wherein the portable

information terminal apparatus includes: acquiring means for acquiring said

program information from said program information providing apparatus;

establishing means for establishing preset information for presetting a desired

program to be recorded unattended based on said program information acquired

by said acquiring means; and transmitting means for transmitting to said

information processing apparatus said preset information established by said

establishing means as well as a convertor means coupled to said storing means

and providing means, said convertor means converting, under control of said

providing means, said program information hierarchically using tags to another

database format that excludes said tags, wherein said another database format

comprises a less amount of data than said page description language and

requires no data analysis following retrieval.

Referring to the Mizutome et al., Mizutome et al. discloses an information

processing system comprising a program information providing apparatus for

providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, wherein the retrieved

program information can be customized and when there is no user preferences

specified a default program guide (commonly watched channels) is displayed to

the user (Figs. 16A, 16B, 22A, and 22B).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have displayed a default program guide when

no user preferences are specified or found as disclosed by Mizutome et al. in the

information processing system disclosed by Ellis et al. in view of Miller et al. in

order to be able to display a program guide whether or not one is customized for

that user or not. Mizutome et al. fails to explicitly state that the default program

guide is displayed when the user ID is unidentifiable, but rather when no user

preferences are found or specified.  However, when Mizutome et al. is combined

with Ellis et al. in view of Miller et al. no user preferences being specified are

equivalent to finding no user ID corresponding to the user since Ellis et al. in view

of Miller et al. is based on user IDs.  Furthermore, Ellis et al. in view of Miller et

al. in view of Mizutome et al. still fail to disclose a portable information terminal

apparatus owned by a user, wherein the portable information terminal apparatus

includes: acquiring means for acquiring said program information from said

program information providing apparatus; establishing means for establishing

preset information for presetting a desired program to be recorded unattended

based on said program information acquired by said acquiring means; and

transmitting means for transmitting to said information processing apparatus said

preset information established by said establishing means as well as a convertor

means coupled to said storing means and providing means, said convertor

means converting, under control of said providing means, said program

information hierarchically using tags to another database format that excludes

said tags, wherein said another database format comprises a less amount of

data than said page description language and requires no data analysis following

retrieval.

Referring to the Huang et al. reference, Huang et al. discloses a portable

information terminal apparatus owned by a user, wherein the portable information

terminal apparatus includes: acquiring means for acquiring said program

information from said program information providing apparatus; establishing

means for establishing preset information for presetting a desired program to be

recorded unattended based on said program information acquired by said

acquiring means; and transmitting means for transmitting to said information

processing apparatus said preset information established by said establishing

means (Figs.2 and  4; col. 3, lines 56-65).  Furthermore, Huang et al. discloses a

portable terminal that utilizes the Palm operating system (Fig. 2), which would

require the EPG to be converted to a language that excludes tag information that

requires less data to be transmitted.

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have used the portable information terminal

apparatus disclosed by Huang et al. to schedule recordings remotely with the

program guide distribution system disclosed by Ellis et al. in view of Miller et al. in

view of Mizutome et al. since Ellis et al. is able to send the program guides over

the internet in order to allow the user to schedule any recordings they may have

forgotten to when they were home, making the device more user-friendly and to

not require as much data be sent to the portable terminal since it operates in the

Palm OS.  However,  Ellis et al. in view of Miller et al. in view of Mizutome et al.

in view of Huang et al. still fail to explicitly disclose a convertor means coupled to

said storing means and providing means, said convertor means converting,

under control of said providing means, said program information hierarchically

using tags to another database format that excludes said tags, wherein said

another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Berger et al. reference, Berger et al. discloses a program information providing apparatus comprising a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval (Figs. 1 and 13; col. 10, line 43 - col. 11, line 54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a convertor means as disclosed by Berger et al. in the device disclosed by Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in order to have properly transmitted the program guide to the portable information terminal.

Regarding claim **6**, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in view of Berger et al. discloses all the limitations previously discussed with respect to claim 5 including that the program information providing apparatus further includes converting means for retrieving said program information  and the advertisement information from said storing means before converting the retrieved program information into data of a file format compatible with said portable information terminal apparatus; and wherein

said providing means provides said data converted by said converting means to

said portable information terminal apparatus (Ellis et al.: col. 1, line 65 - col. 2,

line 3 - there are several ways to send the information which would all require

different formatting).

Regarding claim **7**, Ellis et al. discloses an information processing system

comprising an information processing apparatus which has recording, converter

means, and reproducing functions, which stores program information about

programs and which is owned by the user; wherein said program information

providing apparatus includes: storing means for storing said program information

and advertisement information (Fig. 1); and providing means for retrieving said

program information and the advertisement information from said storing means

before providing the retrieved program information to the user's apparatus (Figs.

2a-2c; col. 5, lines 6-22); and wherein said information processing apparatus

includes: receiving means for receiving said preset information from the user's

apparatus; and recording controlling means for controlling the unattended

recording of said desired program based on said preset information received by

said receiving means (Figs. 5-8c - advertisement information is displayed along

with the program information; col. 9, line 17 - col. 10, line 2). Furthermore, Ellis

et al. discloses the information processing system further comprises converter

means for converting said program information from a page description language

format to another database format, wherein said another database format

comprises a less amount of data than said page description language (Ellis et

al.: col. 1, line 65 - col. 2, line 3 - there are several ways to send the information

which would all require different formatting; the information going to the portable

information terminal apparatus will have less information than the information

going to a set-top box). However, Ellis et al. fails to disclose a portable

information terminal apparatus owned by a user, wherein the program

information terminal apparatus includes: a providing means that retrieves the

program information based on identifying a user ID associated with an

information request transmitted from the portable information terminal apparatus,

wherein upon identifying the user ID the retrieved program information includes

registered content applicable to the user ID, and wherein the user ID is

unidentifiable, the retrieved program information includes commonly watched

channels.  Furthermore, Ellis et al. fails to disclose a portable information

terminal apparatus owned by a user, wherein the portable information terminal

apparatus includes: acquiring means for acquiring said program information from

said information processing apparatus; establishing means for establishing

preset information, when the portable information terminal apparatus is

disconnected from the program information providing apparatus, for presetting a

desired program to be recorded unattended based on said program information

acquired by said acquiring means; and transmitting means for transmitting to said

information processing apparatus said preset information established by said

establishing means.  Regarding the converting means, Ellis et al. fails to explicitly

disclose convertor means coupled to said storing means and providing means,

said convertor means converting, under control of said providing means, said

program information hierarchically using tags to another database format that

excludes said tags, wherein said another database format comprises a less

amount of data than said page description language and requires no data

analysis following retrieval.

Referring to the Miller et al., Miller et al. discloses an information

processing system comprising a program information providing apparatus for

providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, the providing means

retrieving the program information based on identifying a user ID associated with

an information request transmitted from the terminal apparatus, wherein upon

identifying the user ID the retrieved program information includes registered

content applicable to the user ID (Figs. 2, 3, and 10-12; page 4, lines 15-19; page

17, lines 10-29 – custom program guides (EPGs)).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have provided program guides according to

the user's preferences based on their user ID as disclosed by Miller et al in the

information processing system disclosed by Ellis et al. in order to provide a more

user friendly program guide by allowing the user to customize their guide.

However, Ellis et al. in view of Miller et al. fail to disclose that when the user ID is

unidentifiable, the retrieved program information includes commonly watched

channels. Furthermore, Ellis et al. in view of Miller et al. still fail to disclose a portable information terminal apparatus owned by a user, wherein the portable information terminal apparatus includes: acquiring means for acquiring said program information from said program information providing apparatus; establishing means for establishing preset information for presetting a desired program to be recorded unattended based on said program information acquired by said acquiring means; and transmitting means for transmitting to said information processing apparatus said preset information established by said establishing means as well as a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Mizutome et al., Mizutome et al. discloses an information processing system comprising a program information providing apparatus for providing program information about programs that includes: providing means for retrieving the program information from the storing means before providing the retrieved program information to a terminal apparatus, wherein the retrieved program information can be customized and when there is no user preferences specified a default program guide (commonly watched channels) is displayed to the user (Figs. 16A, 16B, 22A, and 22B).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have displayed a default program guide when

no user preferences are specified or found as disclosed by Mizutome et al. in the

information processing system disclosed by Ellis et al. in view of Miller et al. in

order to be able to display a program guide whether or not one is customized for

that user or not.  Mizutome et al. fails to explicitly state that the default program

guide is displayed when the user ID is unidentifiable, but rather when no user

preferences are found or specified.  However, when Mizutome et al. is combined

with Ellis et al. in view of Miller et al. no user preferences being specified are

equivalent to finding no user ID corresponding to the user since Ellis et al. in view

of Miller et al. is based on user IDs.  Furthermore, Ellis et al. in view of Miller et

al. in view of Mizutome et al. still fail to disclose a portable information terminal

apparatus owned by a user, wherein the portable information terminal apparatus

includes: acquiring means for acquiring said program information from said

program information providing apparatus; establishing means for establishing

preset information for presetting a desired program to be recorded unattended

based on said program information acquired by said acquiring means; and

transmitting means for transmitting to said information processing apparatus said

preset information established by said establishing means as well as a convertor

means coupled to said storing means and providing means, said convertor

means converting, under control of said providing means, said program

information hierarchically using tags to another database format that excludes

said tags, wherein said another database format comprises a less amount of

data than said page description language and requires no data analysis following

retrieval.

Referring to the Huang et al. reference, Huang et al. discloses a portable

information terminal apparatus owned by a user, wherein the portable information

terminal apparatus includes: acquiring means for acquiring said program

information from said information processing apparatus; establishing means for

establishing preset information, when the portable information terminal apparatus

is disconnected from the program information providing apparatus, for presetting

a desired program to be recorded unattended based on said program information

acquired by said acquiring means; and transmitting means for transmitting to said

information processing apparatus said preset information established by said

establishing means (Figs.2 and  4; col. 3, lines 56-65).  Furthermore, Huang et al.

discloses a portable terminal that utilizes the Palm operating system (Fig. 2),

which would require the EPG to be converted to a language that excludes tag

information that requires less data to be transmitted.

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have used the portable information terminal

apparatus disclosed by Huang et al. to schedule recordings remotely with the

program guide distribution system disclosed by Ellis et al. in view of Miller et al. in

view of Mizutome et al. since Ellis et al. is able to send the program guides over

the internet in order to allow the user to schedule any recordings they may have

forgotten to when they were home, making the device more user-friendly and to

not require as much data be sent to the portable terminal since it operates in the

Palm OS. However, Ellis et al. in view of Miller et al. in view of Mizutome et al.

in view of Huang et al. still fail to explicitly disclose a convertor means coupled to

said storing means and providing means, said convertor means converting,

under control of said providing means, said program information hierarchically

using tags to another database format that excludes said tags, wherein said

another database format comprises a less amount of data than said page

description language and requires no data analysis following retrieval.

Referring to the Berger et al. reference, Berger et al. discloses a program

information providing apparatus comprising a convertor means coupled to said

storing means and providing means, said convertor means converting, under

control of said providing means, said program information hierarchically using

tags to another database format that excludes said tags, wherein said another

database format comprises a less amount of data than said page description

language and requires no data analysis following retrieval (Figs. 1 and 13; col.

10, line 43 - col. 11, line 54).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have provided a convertor means as

disclosed by Berger et al. in the device disclosed by Ellis et al. in view of Miller et

al. in view of Mizutome et al. in view of Huang et al. in order to have properly

transmitted the program guide to the portable information terminal.

Regarding claim **8**, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in view of Berger et al. discloses all the limitations previously discussed with respect to claim 7 including that the acquiring means further acquires said program information sent from another portable information terminal apparatus (Huang et al.: Fig. 2).

Regarding claim **46**, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in view of Berger et al. discloses all the limitations previously discussed with respect to claim 1 including that the storing means comprises: first storing means for storing said program information in a first file format; and second storing means for storing said program information in a second file format; wherein said providing means is operative to retrieve said program information from said first or second storing means based on a received request, such that, if said request comprises a first file format then said program information is retrieved from said first storing means in said first file format, and if said request comprises a second file format then said program information is retrieved from said second storing means in said second file format, said second file format comprising less data compared to said first file format (Ellis et al.: col. 1, line 65 - col. 2, line 3 - there are several ways to send the information which would all require different formatting, each requiring somewhere to store that format; the information going to the portable information terminal apparatus will have less information than the information going to a set-top box).

6.       Claims 9, 14, 16-20, and 22-27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Huang et al. (U.S. Patent 6,437,836) in view of Miller et al. (GB 2 343

074) in view of Mizutome et al. (U.S. Patent 7,469,413) in view of Berger et al. (U.S.

Patent 7,210,100).

                 Regarding claim **9**, Huang et al. discloses a portable information terminal

apparatus connected to a recording/reproducing apparatus, the portable

information terminal apparatus comprising: acquiring means for acquiring

program about programs; displaying means for displaying the program

information acquired by the acquiring means; establishing means for establishing

preset information for presetting a desired program to be recorded unattended

based on an operational input made by a user referring to the program

information displayed by the displaying means; and transmitting means for

transmitting to said information processing apparatus said preset information

established by said establishing means (Figs.2 and  4; col. 3, lines 56-65); and

registering means for registering detailed information for designating said

program information to be acquired by said acquiring means; wherein said

displaying means further displays said detailed information registered by said

registering means (Figs 1A and 4 – step 414).  Furthermore, Huang et al.

discloses a portable terminal that utilizes the Palm operating system (Fig. 2),

which would require the EPG to be converted to a language that excludes tag

information that requires less data to be transmitted.  However, Huang et al. fails

to disclose a portable information terminal apparatus owned by a user, wherein

the program information terminal apparatus includes: a providing means that

retrieves the program information based on identifying a user ID associated with

an information request transmitted from the portable information terminal

apparatus, wherein upon identifying the user ID the retrieved program

information includes registered content applicable to the user ID, and wherein the

user ID is unidentifiable, the retrieved program information includes commonly

watched channels as well as a convertor means coupled to said storing means

and providing means, said convertor means converting, under control of said

providing means, said program information hierarchically using tags to another

database format that excludes said tags, wherein said another database format

comprises a less amount of data than said page description language and

requires no data analysis following retrieval.

Referring to the Miller et al., Miller et al. discloses an information

processing system comprising a program information providing apparatus for

providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, the providing means

retrieving the program information based on identifying a user ID associated with

an information request transmitted from the terminal apparatus, wherein upon

identifying the user ID the retrieved program information includes registered

content applicable to the user ID (Figs. 2, 3, and 10-12; page 4, lines 15-19; page

17, lines 10-29 – custom program guides (EPGs)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided program guides according to the user's preferences based on their user ID as disclosed by Miller et al in the information processing system disclosed by Huang et al. in order to provide a more user friendly program guide by allowing the user to customize their guide. However, Huang et al. in view of Miller et al. fail to disclose that when the user ID is unidentifiable, the retrieved program information includes commonly watched channels as well as a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Mizutome et al., Mizutome et al. discloses an information processing system comprising a program information providing apparatus for providing program information about programs that includes: providing means for retrieving the program information from the storing means before providing the retrieved program information to a terminal apparatus, wherein the retrieved program information can be customized and when there is no user preferences specified a default program guide (commonly watched channels) is displayed to the user (Figs. 16A, 16B, 22A, and 22B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have displayed a default program guide when no user preferences are specified or found as disclosed by Mizutome et al. in the information processing system disclosed by Huang et al. in view of Miller et al. in order to be able to display a program guide whether or not one is customized for that user or not. Mizutome et al. fails to explicitly state that the default program guide is displayed when the user ID is unidentifiable, but rather when no user preferences are found or specified. However, when Mizutome et al. is combined with Huang et al. in view of Miller et al. no user preferences being specified are equivalent to finding no user ID corresponding to the user since Huang et al. in view of Miller et al. is based on user IDs. However, Huang et al. in view of Miller et al. in view of Mizutome et al. still fail to explicitly disclose a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Berger et al. reference, Berger et al. discloses a program information providing apparatus comprising a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another

database format comprises a less amount of data than said page description

language and requires no data analysis following retrieval (Figs. 1 and 13; col.

10, line 43 - col. 11, line 54).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have provided a convertor means as

disclosed by Berger et al. in the device disclosed by Huang et al. in view of Miller

et al. in view of Mizutome et al. in order to have properly transmitted the program

guide to the portable information terminal.

Regarding claim **14**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9, as well as disclosing storing means for storing

said preset information established by said establishing means; and controlling

means for controlling exchanges of information with said recording/reproducing

apparatus; wherein said transmitting means transmits said preset information

from said storing means to said recording/reproducing apparatus under control of

said controlling means (Huang et al.: Fig. 4).

Regarding claim **16**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 including that the detailed information includes

any one of a region, a channel, and a user ID (Huang et al.: Fig. 5).

Regarding claim **17**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 including that the registering means registers a

plurality of items of said detailed information, and wherein said acquiring means

acquires said program information corresponding to said plurality of items of said

detailed information registered by said registering means (Huang et al.: Fig. 4 –

step 414).

Regarding claim **18**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 including that if said program information

corresponding to said detailed information is acquired by said acquiring means,

then said displaying means further displays a predetermined mark pointing to

said detailed information (Huang et al.: Figs. 4 and 5).

Regarding claim **19**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 as well as disclosing controlling means for

controlling exchanges of information with said recording/reproducing apparatus;

and receiving means which, under control of said controlling means, receives

from said recording/reproducing apparatus a message regarding preset status of

said desired program as part of said preset information transmitted from said

transmitting means; wherein said displaying means further displays a

predetermined mark pointing to said detailed information based on said message

received by said receiving means (Huang et al.: Figs. 2, 4, and 5).

Regarding claim **20**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 as well as the apparatus further comprising

receiving means for receiving image data derived from conversion of said desired

program, recorded by said recording/reproducing apparatus, into a

predetermined file format; wherein said displaying means further displays said

image data received by said receiving means (Huang et al.: Figs. 2 and 4).

Regarding claim **22**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 including a transmitting means transmits

infrared rays modulated to represent a preset signal corresponding to said preset

information (Huang et al.: Fig. 2; col.4, line 62 - col. 5, line 9).

Regarding claim **23**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 including that the transmitting means transmits

radio waves modulated to represent a preset signal corresponding to said preset

information (Huang et al.: col. 9, lines 12 -24).

Regarding claim **24**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 including that the transmitting means transmits

said preset information over a network (Huang et al.: Fig. 2; col. 4, line 62 – col.

5, line 9; col. 9, lines 12-24).

Regarding claim **25**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9 as well as disclosing updating means for

updating said preset information established by said establishing means (Huang

et al.: Fig. 4 - step 420).

Regarding claim **26**, this is a method claim corresponding to the apparatus

claim 9. Therefore, claim 26 is analyzed and rejected as previously discussed

with respect to claim 9.

Regarding claim **27**, this is a non-transitory computer-readable medium

claim corresponding to the apparatus claim 9. Therefore, claim 27 is analyzed

and rejected as previously discussed with respect to claim 9.

7.      Claims 10-13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Huang et al. in view of Miller et al. in view of Mizutome et al. in view of Berger et al.

as applied to claim 9 above, and further in view of Ellis et al. (U.S. Patent 6,898,762).

Regarding claim **10**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9, but fails to disclose a judging means; wherein

said program information includes detailed program information associated with

advertisement information; wherein said judging means judges whether the

program information acquired by said acquiring means is associated with said

advertisement information; and wherein, if said judging means judges that said

program information is not associated with said advertisement information, then

said displaying means does not display said program information.

Referring to the Ellis et al. reference, Ellis et al. discloses a judging

means; wherein said program information includes detailed program information

associated with advertisement information; wherein said judging means judges

whether the program information acquired by said acquiring means is associated

with said advertisement information; and wherein, if said judging means judges

that said program information is not associated with said advertisement

information, then said displaying means does not display said program

information (col. 10, lines 18-27 – advertisements directed to pay-per-view

movies; col. 19, line 64 - col. 20, line 16 – targeted advertisements).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have a judging means as disclosed by Ellis et

al. in the portable information terminal apparatus disclosed by Huang et al. in

view of Miller et al. in view of Mizutome et al. in view of Berger et al. in order to

target the advertisements to the user and the other programs.

Regarding claim **11**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. in view of Ellis et al. discloses all the

limitations as previously discussed with respect to claims 9 and 10 including that

the detailed program information includes either an indicator pointing to a

location where further information associated with said program information

exists, or information about reference to the associated information (Ellis et al:

col. 10, lines 18-27 – advertisements directed to pay-per-view movies; col. 19,

line 64 - col. 20, line 16 – targeted advertisements).

Regarding claim **12**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. in view of Ellis et al. discloses all the

limitations as previously discussed with respect to claims 9 and 10 including that

the advertisement information includes detailed advertisement information

associated with said advertisement information; and wherein said detailed

advertisement information includes either an indicator pointing to a location

where further information associated with said advertisement information exists,

or information about a reference to the associated information (Ellis et al.: col. 10,

lines 18-27 – advertisements directed to pay-per-view movies; col. 19, line 64 -

col. 20, line 16 – targeted advertisements).

Regarding claim **13**, Huang et al. in view of Miller et al. in view of

Mizutome et al. in view of Berger et al. discloses all the limitations as previously

discussed with respect to claim 9, but fails to disclose a judging means and

updating means; wherein said program information is associated with

advertisement information; wherein said advertisement information includes time

limit information denoting a time limit; wherein said judging means judges

whether said time limit denoted by said time limit information in said

advertisement information has expired; and wherein said updating means

updates said program information based on the judgment by said judging means.

Referring to the Ellis et al. reference, Ellis et al. discloses a judging means and updating means; wherein said program information is associated with advertisement information; wherein said advertisement information includes time limit information denoting a time limit; wherein said judging means judges whether said time limit denoted by said time limit information in said advertisement information has expired; and wherein said updating means updates said program information based on the judgment by said judging means (col. 10, lines 18-27 – advertisements directed to pay-per-view movies; col. 19, line 64 - col. 20, line 16 – targeted advertisements).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a judging means as disclosed by Ellis et al. in the portable information terminal apparatus disclosed by Huang et al. in view of Miller et al. in view of Mizutome et al. in view of Berger et al. in order to target the advertisements to the user and the other programs.

Regarding claim **21**, Huang et al. in view of Miller et al. in view of Mizutome et al. in view of Berger et al. discloses all the limitations as previously discussed with respect to claim 9, but fails to disclose a managing means for managing a schedule list in which to register what is scheduled by said user; judging means for judging whether or not to write said preset information established by said establishing means to said schedule list managed by said managing means; and writing means which, based on the judgment by said judging means, writes said preset information established by said establishing

means to said schedule list managed by said managing means; wherein said

displaying means further displays said schedule list including said preset

information written by said writing means.

Referring to the Ellis et al. reference, Ellis et al. discloses a managing

means for managing a schedule list in which to register what is scheduled by

said user; judging means for judging whether or not to write said preset

information established by said establishing means to said schedule list

managed by said managing means; and writing means which, based on the

judgment by said judging means, writes said preset information established by

said establishing means to said schedule list managed by said managing means;

wherein said displaying means further displays said schedule list including said

preset information written by said writing means (col. 9, line 17 – col. 10, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have a judging means as disclosed by Ellis et

al. in the portable information terminal apparatus disclosed by Huang et al. in

view of Miller et al. in view of Mizutome et al. in view of Berger et al. in order to

properly schedule programs for recording so there is no overlapping in scheduled

recording times.

8.      Claims 29, 31-37, 39, 40, 42, and 43 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Ellis et al. (U.S. Patent 6,898,762) in view of Miller et al. (GB 2

343 074) in view of Mizutome et al. (U.S. Patent 7,469,413) in view of Huang et al. in

view of Berger et al. (U.S. Patent 7,120,100).

Regarding claim **29**, Ellis et al. discloses a program information providing

apparatus for providing program information about programs to an information

processing apparatus over a network, said program information providing

apparatus comprising: storing means for storing said program information and

advertisement information (Figs. 2a-2c; col. 5, lines 6-22); converting means for,

based on a request from said information processing apparatus, retrieving said

program information and said advertisement information from said storing means

and then converting the retrieved information into data of a predetermined format

compatible with said information processing apparatus (col. 1, line 65 - col. 2, line

3 - there are several ways to send the information which would all require

different formatting); and providing means for providing said data converted by

said converting means to said information processing apparatus over said

network (col. 1, line 65 - col. 2, line 3).  Furthermore, Ellis et al. discloses the

information processing system further comprises converter means for converting

said program information from a page description language format to another

database format, wherein said another database format comprises a less amount

of data than said page description language  (Ellis et al.: col. 1, line 65 - col. 2,

line 3 - there are several ways to send the information which would all require

different formatting; the information going to the portable information terminal

apparatus will have less information than the information going to a set-top box).

However, Ellis et al. fails to disclose a portable information terminal apparatus

owned by a user, wherein the program information terminal apparatus includes: a

providing means that retrieves the program information based on identifying a

user ID associated with an information request transmitted from the portable

information terminal apparatus, wherein upon identifying the user ID the retrieved

program information includes registered content applicable to the user ID, and

wherein the user ID is unidentifiable, the retrieved program information includes

commonly watched channels.  Regarding the converting means, Ellis et al. fails

to explicitly disclose convertor means coupled to said storing means and

providing means, said convertor means converting, under control of said

providing means, said program information hierarchically using tags to another

database format that excludes said tags, wherein said another database format

comprises a less amount of data than said page description language and

requires no data analysis following retrieval.

Referring to the Miller et al., Miller et al. discloses an information

processing system comprising a program information providing apparatus for

providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, the providing means

retrieving the program information based on identifying a user ID associated with

an information request transmitted from the terminal apparatus, wherein upon

identifying the user ID the retrieved program information includes registered

content applicable to the user ID (Figs. 2, 3, and 10-12; page 4, lines 15-19; page

17, lines 10-29 – custom program guides (EPGs)).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have provided program guides according to

the user's preferences based on their user ID as disclosed by Miller et al in the

information processing system disclosed by Ellis et al. in order to provide a more

user friendly program guide by allowing the user to customize their guide.

However, Ellis et al. in view of Miller et al. fail to disclose that when the user ID is

unidentifiable, the retrieved program information includes commonly watched

channels.  Regarding the converting means, Ellis et al. in view of Miller et al. fails

to explicitly disclose converting the program information from a page description

language format to another database format that excludes tag information since it

is not disclosed which operating system the portable terminal is using as well as

a convertor means coupled to said storing means and providing means, said

convertor means converting, under control of said providing means, said program

information hierarchically using tags to another database format that excludes

said tags, wherein said another database format comprises a less amount of

data than said page description language and requires no data analysis following

retrieval.

Referring to the Mizutome et al., Mizutome et al. discloses an information

processing system comprising a program information providing apparatus for

providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, wherein the retrieved

program information can be customized and when there is no user preferences

specified a default program guide (commonly watched channels) is displayed to

the user (Figs. 16A, 16B, 22A, and 22B).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have displayed a default program guide when

no user preferences are specified or found as disclosed by Mizutome et al. in the

information processing system disclosed by Ellis et al. in view of Miller et al. in

order to be able to display a program guide whether or not one is customized for

that user or not.  Mizutome et al. fails to explicitly state that the default program

guide is displayed when the user ID is unidentifiable, but rather when no user

preferences are found or specified.  However, when Mizutome et al. is combined

with Huang et al. in view of Miller et al. no user preferences being specified are

equivalent to finding no user ID corresponding to the user since Ellis et al. in view

of Miller et al. is based on user IDs.  Regarding the converting means, Ellis et al.

in view of Miller et al. in view of Mizutome et al. fails to explicitly disclose

converting the program information from a page description language format to

another database format that excludes tag information since it is not disclosed

which operating system the portable terminal is using as well as a convertor

means coupled to said storing means and providing means, said convertor

means converting, under control of said providing means, said program

information hierarchically using tags to another database format that excludes

said tags, wherein said another database format comprises a less amount of

data than said page description language and requires no data analysis following retrieval.

Referring to the Huang et al. reference, Huang et al. discloses a portable information terminal apparatus owned by a user, wherein the portable information terminal apparatus includes: acquiring means for acquiring said program information from said program information providing apparatus; establishing means for establishing preset information for presetting a desired program to be recorded unattended based on said program information acquired by said acquiring means; and transmitting means for transmitting to said information processing apparatus said preset information established by said establishing means (Figs.2 and 4; col. 3, lines 56-65). Furthermore, Huang et al. discloses a portable terminal that utilizes the Palm operating system (Fig. 2), which would require the EPG to be converted to a language that excludes tag information that requires less data to be transmitted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the portable information terminal apparatus disclosed by Huang et al. to schedule recordings remotely with the program guide distribution system disclosed by Ellis et al. in view of Miller et al. in view of Mizutome et al. since Ellis et al. is able to send the program guides over the internet in order to allow the user to schedule any recordings they may have forgotten to when they were home, making the device more user-friendly and to not require as much data be sent to the portable terminal since it operates in the

Palm OS. However, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. still fail to explicitly disclose a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Berger et al. reference, Berger et al. discloses a program information providing apparatus comprising a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval (Figs. 1 and 13; col. 10, line 43 - col. 11, line 54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a convertor means as disclosed by Berger et al. in the device disclosed by Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in order to have properly transmitted the program guide to the portable information terminal.

Regarding claim **30**, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in view of Berger et al. discloses all the information

as previously discussed with respect to claim 29, but fails to disclose a charging means for calculating a fee for inserting said advertisement information and charging said fee on a sponsor of said advertisement information.  Official Notice is taken that it is well known to charge the sponsor for advertising.  Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have charged the sponsor a fee for advertising in order for the distribution facility to make money to continue providing program information.

Regarding claim **31**, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in view of Berger et al. discloses all the information as previously discussed with respect to claim 29, including that the storing means further stores user information about a user who owns said information processing apparatus (Ellis et al.: col. 19, line 64 – col. 20, line 16).

Regarding claim **32**, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in view of Berger et al. discloses all the information as previously discussed with respect to claim 29, including that the program information includes detailed program information associated with said program information, and wherein said advertisement information includes detailed advertisement information associated with said advertisement information (Ellis et al.: col. 19, line 64 - col. 20, line 16).

Regarding claim **33**, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. in view of Berger et al. discloses all the information as previously discussed with respect to claims 29 and 32, including that the

detailed program information includes either an indicator pointing to a location

where further information associated with said program information exists, or

information about a reference to the associated information (Ellis et al.: col. 19.

line 64 – col. 20, line 16).

Regarding claim **34**, Ellis et al. in view of Miller et al. in view of Mizutome

et al. in view of Huang et al. in view of Berger et al. discloses all the information

as previously discussed with respect to claims 29 and 32, including that the

detailed advertisement information includes either an indicator pointing to a

location where further information associated with said advertisement information

exists, or information about a reference to the associated information (Ellis et al.:

col. 19. line 64 – col. 20, line 16).

Regarding claim **35**, Ellis et al. in view of Miller et al. in view of Mizutome

et al. in view of Huang et al. in view of Berger et al. discloses all the information

as previously discussed with respect to claim 29 including that the advertisement

information includes time limit information denoting a time limit (Ellis et al.: col.

10, lines 18-27 – advertisements directed to pay-per-view movies; col. 19, line 64

- col. 20, line 16 – targeted advertisements).

Regarding claim **36**, this is a method claim corresponding to the apparatus

claim 29.  Therefore, claim 36 is analyzed and rejected as previously discussed

with respect to claim 29.

Regarding claim **37**, this is a non-transitory computer-program storage

medium claim corresponding to the apparatus claim 29. Therefore, claim 37 is

analyzed and rejected as previously discussed with respect to claim 29.

Regarding claim **39**, Ellis et al. discloses a recording/reproducing

apparatus connected to a portable information terminal apparatus, said

recording/reproducing apparatus comprising: receiving means for receiving from

said portable information terminal apparatus preset information for presetting a

desired program to be recorded unattended, the preset information determined

from program information received by the portable information terminal

apparatus; and recording controlling means for controlling the unattended

recording of said desired program based on said preset information received by

said receiving means (Figs. 3 and 4), wherein the preset information is converted

to a predetermined format compatible to with the recording/reproducing

apparatus (col. 1, line 65 - col. 2, line 3 - several ways the program information

and the advertisement information can be sent to the information processing

apparatus. It is well known in the art that the information would need to be

converted to accommodate the receiving apparatus in order to be displayed

correctly. Furthermore, in Fig. 2a processing circuitry 54 includes circuitry

suitable for finding and transmitting the requested information to the information

processing apparatus.). Furthermore, Ellis et al. discloses the information

processing system further comprises converter means for converting said

program information from a page description language format to another

database format, wherein said another database format comprises a less amount
of data than said page description language  (Ellis et al.: col. 1, line 65 - col. 2,
line 3 - there are several ways to send the information which would all require
different formatting; the information going to the portable information terminal
apparatus will have less information than the information going to a set-top box).
However, Ellis et al. fails to disclose a portable information terminal apparatus
owned by a user, wherein the program information terminal apparatus includes: a
providing means that retrieves the program information based on identifying a
user ID associated with an information request transmitted from the portable
information terminal apparatus, wherein upon identifying the user ID the retrieved
program information includes registered content applicable to the user ID, and
wherein the user ID is unidentifiable, the retrieved program information includes
commonly watched channels.  Regarding the converting means, Ellis et al. fails
to explicitly disclose convertor means coupled to said storing means and
providing means, said convertor means converting, under control of said
providing means, said program information hierarchically using tags to another
database format that excludes said tags, wherein said another database format
comprises a less amount of data than said page description language and
requires no data analysis following retrieval.

Referring to the Miller et al., Miller et al. discloses an information
processing system comprising a program information providing apparatus for
providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, the providing means

retrieving the program information based on identifying a user ID associated with

an information request transmitted from the terminal apparatus, wherein upon

identifying the user ID the retrieved program information includes registered

content applicable to the user ID (Figs. 2, 3, and 10-12; page 4, lines 15-19; page

17, lines 10-29 – custom program guides (EPGs)).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have provided program guides according to

the user's preferences based on their user ID as disclosed by Miller et al in the

information processing system disclosed by Ellis et al. in order to provide a more

user friendly program guide by allowing the user to customize their guide.

However, Ellis et al. in view of Miller et al. fail to disclose that when the user ID is

unidentifiable, the retrieved program information includes commonly watched

channels. Regarding the converting means, Ellis et al. in view of Miller et al. fails

to explicitly disclose converting the program information from a page description

language format to another database format that excludes tag information since it

is not disclosed which operating system the portable terminal is using as well as

a convertor means coupled to said storing means and providing means, said

convertor means converting, under control of said providing means, said program

information hierarchically using tags to another database format that excludes

said tags, wherein said another database format comprises a less amount of

data than said page description language and requires no data analysis following

retrieval.

Referring to the Mizutome et al., Mizutome et al. discloses an information

processing system comprising a program information providing apparatus for

providing program information about programs that includes: providing means for

retrieving the program information from the storing means before providing the

retrieved program information to a terminal apparatus, wherein the retrieved

program information can be customized and when there is no user preferences

specified a default program guide (commonly watched channels) is displayed to

the user (Figs. 16A, 16B, 22A, and 22B).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have displayed a default program guide when

no user preferences are specified or found as disclosed by Mizutome et al. in the

information processing system disclosed by Ellis et al. in view of Miller et al. in

order to be able to display a program guide whether or not one is customized for

that user or not. Mizutome et al. fails to explicitly state that the default program

guide is displayed when the user ID is unidentifiable, but rather when no user

preferences are found or specified. However, when Mizutome et al. is combined

with Huang et al. in view of Miller et al. no user preferences being specified are

equivalent to finding no user ID corresponding to the user since Ellis et al. in view

of Miller et al. is based on user IDs. Regarding the converting means, Ellis et al.

in view of Miller et al. in view of Mizutome et al. fails to explicitly disclose

converting the program information from a page description language format to

another database format that excludes tag information since it is not disclosed

which operating system the portable terminal is using as well as a convertor

means coupled to said storing means and providing means, said convertor

means converting, under control of said providing means, said program

information hierarchically using tags to another database format that excludes

said tags, wherein said another database format comprises a less amount of

data than said page description language and requires no data analysis following

retrieval.

Referring to the Huang et al. reference, Huang et al. discloses a portable

information terminal apparatus owned by a user, wherein the portable information

terminal apparatus includes: acquiring means for acquiring said program

information from said program information providing apparatus; establishing

means for establishing preset information for presetting a desired program to be

recorded unattended based on said program information acquired by said

acquiring means; and transmitting means for transmitting to said information

processing apparatus said preset information established by said establishing

means (Figs.2 and  4; col. 3, lines 56-65).  Furthermore, Huang et al. discloses a

portable terminal that utilizes the Palm operating system (Fig. 2), which would

require the EPG to be converted to a language that excludes tag information that

requires less data to be transmitted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the portable information terminal apparatus disclosed by Huang et al. to schedule recordings remotely with the program guide distribution system disclosed by Ellis et al. in view of Miller et al. in view of Mizutome et al. since Ellis et al. is able to send the program guides over the internet in order to allow the user to schedule any recordings they may have forgotten to when they were home, making the device more user-friendly and to not require as much data be sent to the portable terminal since it operates in the Palm OS. However, Ellis et al. in view of Miller et al. in view of Mizutome et al. in view of Huang et al. still fail to explicitly disclose a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description language and requires no data analysis following retrieval.

Referring to the Berger et al. reference, Berger et al. discloses a program information providing apparatus comprising a convertor means coupled to said storing means and providing means, said convertor means converting, under control of said providing means, said program information hierarchically using tags to another database format that excludes said tags, wherein said another database format comprises a less amount of data than said page description

language and requires no data analysis following retrieval (Figs. 1 and 13; col.

10, line 43 - col. 11, line 54).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have provided a convertor means as

disclosed by Berger et al. in the device disclosed by Ellis et al. in view of Miller et

al. in view of Mizutome et al. in view of Huang et al. in order to have properly

transmitted the program guide to the portable information terminal.

Regarding claim **40**, Ellis et al. in view of Miller et al. in view of Mizutome

et al. in view of Huang et al. in view of Berger et al. discloses all the information

as previously discussed with respect to claim 39 including that the controlling

means into image data of a predetermined file format in response to a request

from said portable information terminal apparatus; and transmitting means for

transmitting said image data converted by said converting means to said portable

information terminal apparatus (Ellis et al.: col. 1, line 65 - col. 2, line 3 - there are

several ways to send the information which would all require different formatting).

Regarding claim **41**, Ellis et al. in view of Miller et al. in view of Mizutome

et al. in view of Huang et al. in view of Berger et al. discloses all the information

as previously discussed with respect to claim 39 but fails to disclose a

transmitting means for transmitting to said portable information terminal

apparatus a message regarding preset status of said desired program as part of

said preset information received by said receiving means.  Official Notice is taken

that it is well known to notify the user of the recording status and any conflicts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to alert the user regarding the recording status to allow the user to make different recording arrangements if necessary.

Regarding claim **42**, this is a method claim corresponding to the apparatus claim 39. Therefore, claim 42 is analyzed and rejected as previously discussed with respect to claim 39.

Regarding claim **43**, this is a non-transitory computer-program storage medium claim corresponding to the apparatus claim 39. Therefore, claim 43 is analyzed and rejected as previously discussed with respect to claim 39.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on 571-272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


                                                    Heather R Jones
                                                    Examiner
                                                    Art Unit 2481

HRJ
December 3, 2010

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